

High Frequency Ceramic Solutions

1.85GHz LPF EIA 0806 (2.0x1.5x0.98mm) extra attenuation behavior P/N 1850LP16A0105E-AEC

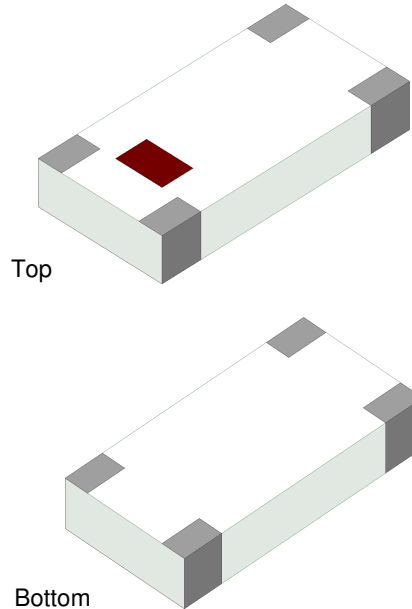
Detail Specification: 9/14/2021

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AEC-Q200 Qualified Component

General Specifications

Part Number	1850LP16A0105E-AEC
Passband (MHz)	1805 - 1910
Insertion Loss (dB)	0.4 max.
Ripple (dB)	0.4 max. @ BW
Return Loss (dB)	11.7 min.
Attenuation (dB)	30 min. @3.61 - 3.82GHz 20 min. @5.415 - 5.73GHz
Power Capacity (W)	1 max. (CW)
Operating Temperature	-40 to +105 °C
Recommended Storage Conditions and Period for Unused Product on T&R	+5°C to +35°C Humidity 45 - 75% RH 18 months max.
Reel Quantity (pcs/reel)	4,000



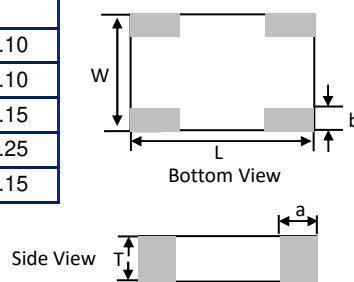
Part Number Explanation

P/N Suffix	Packing Style	Bulk (loose pcs.)	Suffix = S	E.g. 1850LP16A0105S-AEC
		T & R	Suffix = E	E.g. 1850LP16A0105E-AEC
	Termination Style	Ni/Sn	Suffix = None	E.g. 1850LP16A0105(E or S)-AEC
		50Ω SMA	Suffix = EB1SMA	E.g. 1850LP16A0105-EB1SMA

Would you like the layout file for component? Please send us as message at: <https://www.johansontechnology.com/ask-a-question>

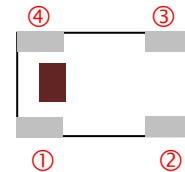
Mechanical Dimensions

	In	mm
L	0.080 ± 0.004	2.03 ± 0.10
W	0.061 ± 0.004	1.55 ± 0.10
T	0.039 ± 0.006	0.98 ± 0.15
a	0.022 ± 0.010	0.56 ± 0.25
b	0.014 ± 0.006	0.35 ± 0.15



Terminal Configuration

No.	Function	No.	Function
1	IN/OUT	3	GND
2	IN/OUT	4	GND



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Ver. 2.1

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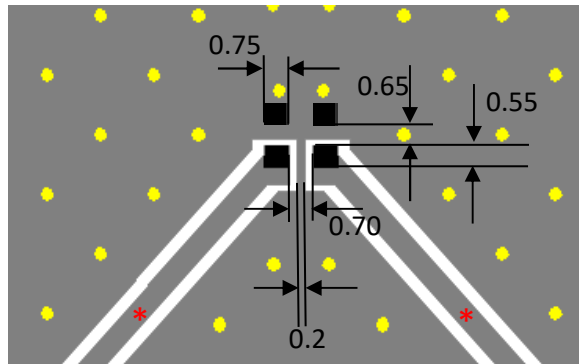
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Mounting Considerations

Mount these devices with brown mark facing up.

*Line width should be designed to provide 50Ω impedance matching characteristics.

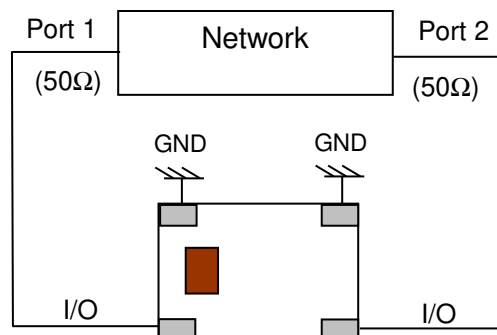


-  Solder Resist
-  Land
-  Through-hole ($\phi 0.3$)

Units in mm

Need help with the layout, s-parameters, simulation, or design validation?
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Measuring Diagram



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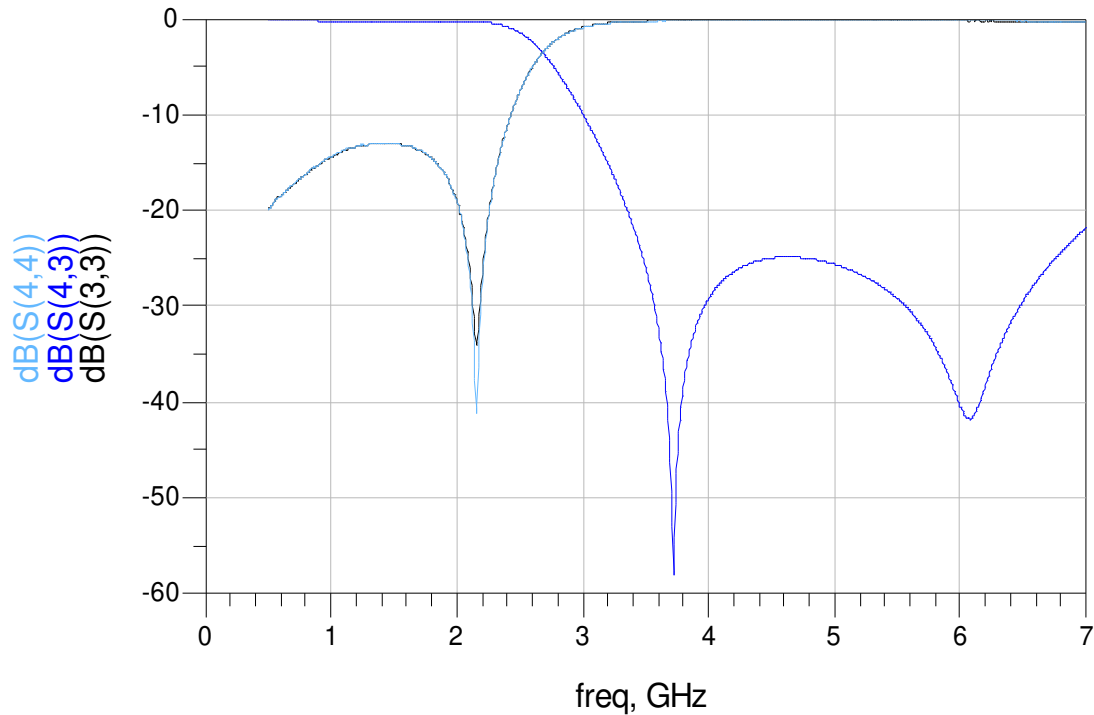
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Typical Electrical Performance (T=25°C)

Insertion and Return Loss



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Application Notes, Layout Files, and more

<https://www.johansontechnology.com/low-pass-filters>

Packaging information

<https://www.johansontechnology.com/tape-reel-packaging>

Soldering Information

<https://www.johansontechnology.com/ipcsoldering-profile>

MSL Info

<https://www.johansontechnology.com/msl-rating>

Recommended Storage Condition and Max Shelf Life

<https://www.johansontechnology.com/recommended-storage-conditions>

RoHS Compliance

<https://www.johansontechnology.com/technical-notes/rohs-compliance>

Antenna layout and tuning techniques

<https://www.johansontechnology.com/tuning.html>

Antenna layout review, tuning, and characterization services

<https://www.johansontechnology.com/ipc-antenna-services>

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